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EXAMINER

PHAM, KHANH B

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/677,492	Applicant(s) MOHAN ET AL.	
	Examiner Khanh B. Pham	Art Unit 2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 14-29 and 33-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 14-29 and 33-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) ☐ Notice of References Cited (PTO-892) | 4) ☐ Interview Summary (PTO-413) |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) ☐ Information Disclosure Statement(s) (PTO/SB/08) | 5) ☐ Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) ☐ Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1-9, 14-29, 33-43** are rejected under 35 U.S.C. 102(e) as being anticipated by Spivak et al. (US 2002/0016800 A1), hereinafter “**Spivak**”.

As per claim 1, Spivak teaches a computer implemented method for analyzing at least one concept within at least one object, comprising the steps of:

- (i) “selecting, by a user, of the at least one object for inclusion in an initial set of objects to be analyzed, wherein at least a portion of the initial set of objects is organized into categories selected by the user” at [0037]-[0038];
- (ii) “selecting, by the user, and extracting the at least one concept from the initial set of objects to create an initial set of concepts” at [0045];
- (iii) “performing multi-dimensional analysis, based on user input, on the at least one concept present in the initial set of objects to analyze the at least one

concept within the at least one object and produce analysis results” at [0059]-[0063];

- “the multidimensional analysis comprising selection by the user of a subset of concepts based on the at least one concept or one or more categories, the multidimensional analysis indicating whether each concept in the subset of concepts, for each object or category, is present or absent” at [0055], [0059]-[0063] and Figs. 5-6; and
- (iv) “sending the analysis results to an output device” at Figs. 5-6;
- “wherein if a concept is present in an object, the strength of presence of the concept in the object is indicated to the user through the output device” at [0061]-[0063] and figs. 5-6;
- “if the concept is absent from the object, the absence of the concept from the object is explicitly indicated to the user through the output device” at [0062]-[0063] and Figs. 5-6.

As per claim 2, Spivak teaches the method of claim 1, further comprising the steps of

- (v) “based on the step of performing multi-dimensional analysis, discovering if at least one additional concept exists to create a second set of concepts” at [0059];
- (vi) “repeating steps (ii) through (iii) if the at least one additional concept exists” [0059]-[0063];

- (vii) “discovering if at least one additional object exists for inclusion in the initial set of objects to create a second set of objects” at [0058]; and
- (viii) repeating steps (ii) through (vi) if the at least one additional object exists [0059]-[0063].

As per claim 3, Spivak teaches the method of claim 1, further comprising the steps of:

- (v) “determining, based on the step of performing multi-dimensional analysis, at least one concept in the initial set of concepts to be deleted” at [0058];
- (vi) “deleting the determined at least one concept from the initial set of concepts to create a second set of concepts” at [0058];
- (vii) “repeating steps (ii) through (vi) if an additional concept exists that needs to be deleted from the initial set of concepts at [0058];
- (viii) “discovering if at least one additional object exists to be included in the initial set of object(s) to create a second set of objects” at [0058]; and
- (ix) “repeating steps (ii) through (vii) if the at least one additional object exists” at [0059]-[0063].

As per claim 4, Spivak teaches the method of claim 1, wherein “the at least one object is comprised of at least one of structured, unstructured and semi-structured data” at [0024].

As per claim 5, Spivak teaches the method of claim 1, wherein “the at least one object comprises a plurality of objects” at [0024].

As per claim 6, Spivak teaches the method of claim 1, wherein “said selection of the at least one object is based upon a condition, wherein the condition is selected from the group consisting of a location of the at least one object on a computer disk drive, a LAN, or a WAN; a location of the at least one object within a database; a URL address of the at least one object; a presence of a predefined concept, keyword, or text in the at least one object; and an absence of a predefined concept, keyword, or text in the at least one object” at [0037]-[0038].

As per claim 7, Spivak teaches the method of claim 1, wherein the at least one object comprises an electronic file” at [0024].

As per claim 8, Spivak teaches the method of claim 7, wherein the electronic file is selected from the group consisting of a Program File (*.exe), Text File (*.txt, *.pro, *.csv), Word Document (*.doc), Rich Text Format (*.rtf), Windows Write (*.wri), Word for Macintosh (*.mcw), MS-DOS Text with Layout (*.asc), Text with Layout (*.arts), E-mails (*.eml), Outlook Address Book (*.olk), Personal Address Book (*.pab), WordPerfect file (*.wpd), Schedule+ Contact (*.scd), Powerpoint (*.ppt), Harvard Graphics Show (*.sh3),

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Harvard Graphics Chart (*.ch3), Freelance Windows file (*.pre), Excel File (*.xl*), Adobe Acrobat File (*.pdf), Web Page (*.htm*, *.asp, *.jsp), Query File (*.qy), Lotus 1-2-3 File (*.wk*), Quattro Pro/Dos File (*.wql), Microsoft Works File (*.wks), Works for Window (*.wps), Microsoft Access Files (*.mdb), Dbase Files (*.dbf), SYLK Files (*.slk), Data Interchange Format File (*.dif), Backup File (*.bak), Quattro Pro 1.0/5.0 (win) (*.wbl), Text Recovered from any File (*.*), Graphic Interchange Format (*.gif), Windows Bitmap (*.bmp), JPEG file interchange format (*.jpg), Tag image file format (*.tif), portable network graphics (*.png), Kodak PhotoCD (*.pcd), PC Paintbrush (*.pcx), Raster file (*.ras), Audio File (*.wav, *.snd, *.aif, *.aifc, *.aiff, *.wma, *.mp3), CD Audio Track (*.cda), Media Playlist (*.asx, *.wax, *.m3u, *.wvx), MIDI File (*.mid, *.rmi, *.midi), Movie File (*.mpeg, *.mpg, *.mlv, *.mp2, *.mpa, *.mpe), Video File(*.avi, *.wmv), Windows Media File (*.asf, *.wm, *.wma, *.wmv), and Tactile Sensing File in ASCII, LabView, or MATLAB formats” at [0024].

As per claim 9, Spivak teaches the method of claim 1, wherein the step of extracting the at least one concept is further comprised of at least one of the following steps: (a) using an application programming interface (API) to obtain a common format of the at least one object; (b) using an extraction algorithm to obtain a common format of the at least one object; (c) using an application to determine image intensity of the at least one object; (d) using an application to determine at least one boundary within the at least one object; (e) using an application to map audio waveforms within the at least

one object to a text format; and (f) using an application to convert non-textual information within the at least one object into text” at [0028].

As per claim 14, Spivak teaches the method of claim 1, wherein the step of performing multi-dimensional analysis further comprises at least one of the following steps at [0038]:

(a) “determining the number of the at least one object within the initial set of object”

(b) determining a frequency of occurrence of the at least one concept within the initial set of objects;

(c) determining a frequency of occurrence of the at least one concept within a subset of the initial set of objects;

(d) determining a frequency of occurrence of the at least one concept within a set outside of the initial set of objects;

(e) determining a normalized frequency of occurrence of the at least one concept within the initial set of objects;

(f) determining a normalized frequency of occurrence of the at least one concept within a subset of the initial set of objects;

(g) determining a normalized frequency of occurrence of the at least one concept(s) within a set outside of the initial set of objects;

(h) determining an electronic path to the location of the at least one object;

- (i) determining at least one characteristic of the at least one object;
- (j) determining at least one concept type for the at least one concepts within the initial set of objects;
- (k) determining a number of objects which contain a set of concepts within the initial set of objects;
- (l) determining a number of objects which contain a set of concepts within a set outside of the initial set of objects;
- (m) determining a definition for the at least one concept; and
- (n) determining a position of the at least one concept within each object containing the at least one concept.

As per claim 15, Spivak teaches the method of claim 14, wherein “the at least one characteristic is selected from the group consisting of a file extension, a creation date, an effective date and a status” at [0038].

As per claim 16, Spivak teaches the method of claim 14, wherein “the at least one concept type is a parent type” at [0071].

As per claim 17, Spivak teaches the method of claim 14, wherein “the step of performing multi-dimensional analysis includes slicing-and-dicing across at least one dimension of the initial set of objects” at [0057]-[0058].

As per claim 18, Spivak teaches the method of claim 17, wherein “the at least one dimension is selected from the group consisting of a time dimension, a geographical location dimension, an electronic location dimension, a person dimension, a multiple-person dimension, a business unit dimension, an organization dimension, a process dimension, a product dimension, a service dimension, a subject dimension, a category dimension, a concept dimension, a concept type dimension, a user viewpoint dimension, and an entity dimension in a structured database” at [0070]-[0071].

As per claim 19, Spivak teaches the method of claim 1, wherein “the step of performing multi-dimensional analysis further comprises at least one of the following steps: (a) generating reports based on the analysis; and (b) presenting the analysis in a graphical or visual format” at [0079].

As per claim 20, Spivak teaches the method of claim 1, further comprising the step of “using the multi-dimensional analysis to discover a result, wherein the result is selected from the group consisting of a trend of concepts within the initial set of objects, a pattern of concepts within the initial set of objects, a concept exception within the initial set of objects, and at least one relationship between concepts within the initial set of objects” at [0075].

As per claim 21, Spivak teaches the method of claim 1, wherein “the method further comprises at least one of the following steps: storing the at least one concept in a concept repository; and sharing the at least one concept with other users” at [0096].

As per claim 22, Spivak teaches the method of claim 21, wherein “the method further comprises the step of creating business rules to be used in the transformation of data into a datastore” at [0042].

Claims 23-29 recite similar limitation as discussed in the rejection of claims 1-9, 14-22 above and are therefore rejected by the same reasons.

As per claim 33, Spivak teaches the method of claim 1, wherein “said step (iii) comprises creation of a hierarchy of the set of concepts based on user input” at [0071].

As per claim 34, Spivak teaches the method of claim 23, wherein “said step (iii) comprises creation of a hierarchy of the set of concept based on user input” at [0071].

As per claim 35, Spivak teaches the method of claim 1, further comprising:

(v) “refining the at least one concept based upon relationships to other concepts performed after step (ii) and before step (iii)” at [0058].

As per claim 36, Spivak teaches the method of claim 35, wherein “the step of refining the at least one concept comprises the step of: determining the relationship of the at least one concept to another concept within the initial set of objects” at [0059], [0070].

As per claim 37, Spivak teaches the method of claim 35, wherein “the step of refining the at least one concept comprises the step of determining the relationship of the at least one concept to another concept outside of the initial set of objects” at [0070]-[0071].

As per claim 38, Spivak teaches the method of claim 35, wherein the step of refining the at least one concept further comprises at least one of the following steps at [0070]-[0071]:

- (a) determining a relationship of the at least one concept to another concept within an existing reference; (b) determining a relationship of the at least one concept to another concept using a natural language processing (NLP) algorithm;
- (c) determining a frequency of occurrence of the at least one concept within the initial set of objects; (d) determining a frequency of occurrence of the at least one concept within an outside set of objects;
- (e) determining a normalized frequency of occurrence of the at least one concept within the initial set of objects; and
- (f) determining a normalized frequency of occurrence of the at least one concept within the outside set of objects.

As per claim 39, Spivak teaches the method of claim 38, wherein “the existing reference is selected from the group consisting of an English thesaurus, an English dictionary, a non-English thesaurus, a non-English dictionary, a domain specific thesaurus, and a domain specific dictionary” at Fig. 7.

Claims 40-43 recite similar limitations as in claims 35-38 and are therefore rejected by the same reasons.

Response to Arguments

3. Applicant's arguments filed 1/28/2008 have been fully considered but they are not persuasive. The examiner respectfully traverses applicant's arguments.

4. Regarding claim 1, applicant argued that Spivak does not teach "if a concept is present in an object, the strength of presences of the concept in the object is indicated to the user through the outputted device, and if the concept is absent from the object, the absence of the concept from the object is explicitly indicated to the user through the output device" because Spivak only output present/recognized concepts in the document. On the contrary, Spivak teaches at [0062] and Fig. 4 the steps of calculating concept weight of the concept in the document, where concept weights have numerical values ranging from 0 to 1. A concept having concept weight 0, or less than a threshold value, is determined to be unrecognized/absent. Therefore, from the output of step 504 below, a user can recognizes the strength of presence of the concept and absence of the concept based on the concept weight associated with the concept.

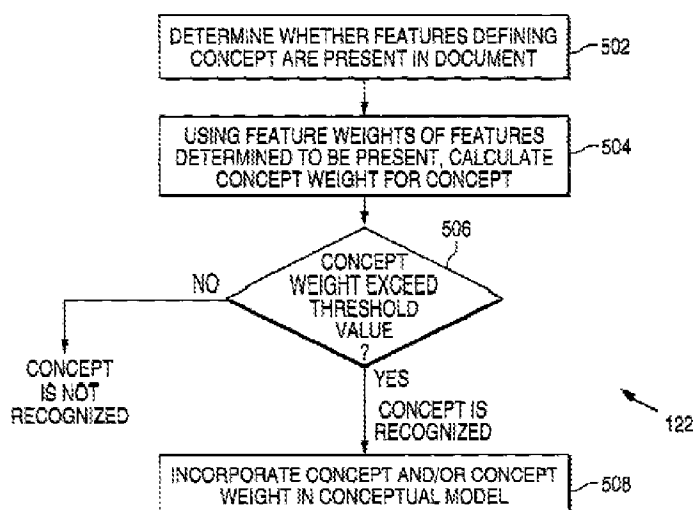


FIG. 5

In light of the foregoing arguments, the 35 U.S.C 102 rejection is hereby sustained.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh B. Pham whose telephone number is (571) 272-4116. The examiner can normally be reached on Monday through Friday 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (571) 272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Khanh B. Pham/
Primary Examiner
Art Unit 2166

April 16, 2008